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Amended

single piece cover is affixed directly to the top film of the digitizer mechanism. The single piece cover has a flat outer surface that is free of any steps or indentations which provides an enclosure that is both dust free and waterproof. --

REMARKS

Claims 1-20 are pending. Claims 16 and 18-20 are rejected under 35 U.S.C. 102(e) as being unpatentable over Aroyan et al. Claims 16 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aroyan et al. in view of Donahue et al.

Drawings

The Applicants respectfully request that the objections to the drawings be withdrawn. Drawing amendments are filed herewith under a separate paper. Figure 1 has been amended and is now labeled "Prior Art" in accordance with the recommendations of the Examiner.

102 Rejection

Claims 16 and 18-20 are rejected under 35 U.S.C. 102(e) as being unpatentable over Aroyan et al. The Applicants have reviewed the cited reference and respectfully submit that the present invention as recited in Claims 16 and 18-20 are neither shown nor suggested by Aroyan et al.

The Examiner is respectfully directed to independent Claim 16 which recites that an embodiment of the present invention is directed to a display assembly for a portable electronic device comprising:

... a flat panel display screen; a flat panel, clear, resistive digitizer mechanism disposed over said flat panel display screen; and a bezel-less cover film disposed over a top surface of said digitizer mechanism wherein said cover film and said top surface combine to form a single mechanical structure ...

Claims 18-20 depend from independent claim 16 and recite further limitations of the present invention.

Aroyan et al. does not anticipate or render obvious a display assembly for a portable electronic device comprising “a flat panel, clear, resistive digitizer mechanism disposed over said flat panel display screen” as claimed. Aroyan et al. discloses a method for controlling the flow of current through a resistive layer for converting physical position information on the resistive layer into electrical signals. Moreover, Aroyan et al. teaches at column 8, lines 40-50 that analog signals that propagate through a resistive layer located between a disclosed touch screen and controller electronics are digitized by the controller electronics. It should be appreciated that Applicants’ Claim 1 sets forth specific structural and physical attributes of the therein recited digitizer mechanism that are not shown or suggested by Aroyan et al. For example, nowhere in Aroyan et al. is there taught a digitizer mechanism that comprises a flat panel clear resistive digitizer mechanism disposed over a flat panel display screen as is set forth in Claim 16.

In addition, the Applicants’ respectfully disagree with the interpretation in the instant rejection of the Aroyan et al. reference having disclosed a resistive layer that is

readable on the digitizer mechanism of Claim 16. As is clearly shown by the passages referenced above, the Aroyan et al. reference teaches that its disclosed controller electronics (and not its disclosed resistive layer) are responsible for performing the digitizing function of the therein disclosed system. Consequently, the Aroyan et al. reference simply does not teach what the Examiner relies upon it as teaching.

Therefore, Applicants respectfully submit that Aroyan et al. does not show or suggest the embodiments of the Applicants' invention as is set forth in Claim 16 and, as such, Claim 16 overcomes the cited art of record under 35 U.S.C. §102. Accordingly, Applicants respectfully submit that Claims 18-20 dependent on Claim 16 likewise overcomes the cited art of record as being dependent on an allowable base claim and therefore are in condition for allowance.

103 Rejections

Claims 1-5 and 7-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aroyan et al. in view of Donahue et al. The Applicants have reviewed the cited references and respectfully submit that the embodiments of the present invention as recited in Claims 1-5 and 7-17 are neither shown nor suggested by Aroyan et al.

The Examiner is respectfully directed to independent Claim 1 which recites that an embodiment of the present invention is directed to an integrated/enclosure touch screen assembly comprising:

... a digitizer mechanism comprising a top

film and a resistive digitizer element; and a single piece cover enclosure for said touch screen assembly disposed over said top film of said digitizer mechanism to allow mechanical transfer between said single piece cover and said digitizer mechanism ...

Independent Claims 9 and 16 recite limitations similar to those of Claim 1. Claims 2-5, 7 and 8 depend from independent Claim 1, Claims 10-15 depend from independent Claim 9, and Claim 17 depends from independent Claim 16 and recite further features of the present invention.

Aroyan et al. does not anticipate or render obvious an integrated enclosure touch screen assembly comprising “a digitizer mechanism comprising a top film and a resistive digitizer element” as claimed. Aroyan et al. only shows a method for controlling the flow of current through a resistive layer for converting physical position information on the resistive layer into electrical signals. Moreover, Aroyan et al. teaches at column 8, lines 40-50 that analog signals that propagate through the resistive layer between a disclosed touch screen and a disclosed controller electronics are digitized by the controller electronics. It should be appreciated that Applicants’ Claim 1 (and similar limitations in Claims 9 and 16) sets forth specific structural and physical attributes of the recited digitizer mechanism that are not shown or suggested by Aroyan et al. For example, nowhere in the Aroyan et al. reference is there taught a digitizer mechanism that comprises a top film and a resistive digitizer element as is set forth in Claim 1.

In addition, the Applicants respectfully disagree with the Examiner's interpretation of the Aroyan et al. reference as having disclosed a resistive layer that is readable on the digitizer mechanism of Claim 1. As is clearly shown by the passages referenced above, the Aroyan et al. reference teaches that its disclosed controller electronics (and not its disclosed resistive layer) are responsible for performing the digitizing function of the therein disclosed system. Consequently, the Aroyan et al. reference does not teach or suggest the subject matter that the Examiner relies upon it as teaching.

The cited combination fails to teach or suggest the embodiment of Claim 1. Donohue et al. in combination with Aroyan et al. does not overcome the shortcomings of Aroyan et al. Donohue et al. does not anticipate or render obvious an integrated enclosure touch screen assembly comprising "a digitizer mechanism comprising a top film and a resistive digitizer element." Donohue only shows a touch screen assembly that employs a single piece cover enclosure. It should be appreciated that Applicants' Claim 1 (and similar limitations of Claims 9 and 16) sets forth specific structural and physical attributes of the recited digitizer mechanism that are not shown or suggested by Donahue et al. For example, nowhere in Donohue et al. is there taught a digitizer mechanism that comprises a top film and a resistive digitizer element as is set forth in Applicants' Claim 1. As such, the Donahue et al. reference simply does not teach what the Examiner relies upon it as teaching. Consequently, Donohue et al. either alone or in combination with Aroyan et al. does not anticipate or render obvious the claimed invention.

Therefore, Applicants respectfully submit that Aroyan et al. and Donahue et al. either alone or in combination do not show or suggest the Applicants invention as is set forth in Claims 1, 9, and 16 and, as such, Claims 1, 9, and 16 traverse the Examiner's basis for rejection under 35 U.S.C. §103. Accordingly, Applicants respectfully submit that Claims 2-5, 7 and 8 dependent on Claim 1, Claims 10-15 dependent on Claim 9, and Claim 17 dependent on Claim 16 likewise traverse the Examiners basis for rejection as being dependent on an allowable base claim and therefore are themselves in condition for allowance.

SUMMARY


In view of the foregoing amendments and remarks, the Applicants respectfully submit that the pending claims are in condition for allowance. The Applicants respectfully request reconsideration of the Application and allowance of the pending Claims.

If the Examiner determines the prompt allowance of these claims could be facilitated by a telephone conference, the Examiner is invited to contact Reginald A. Ratliff at (408) 938-9060.

Dated: 2/5, 2003

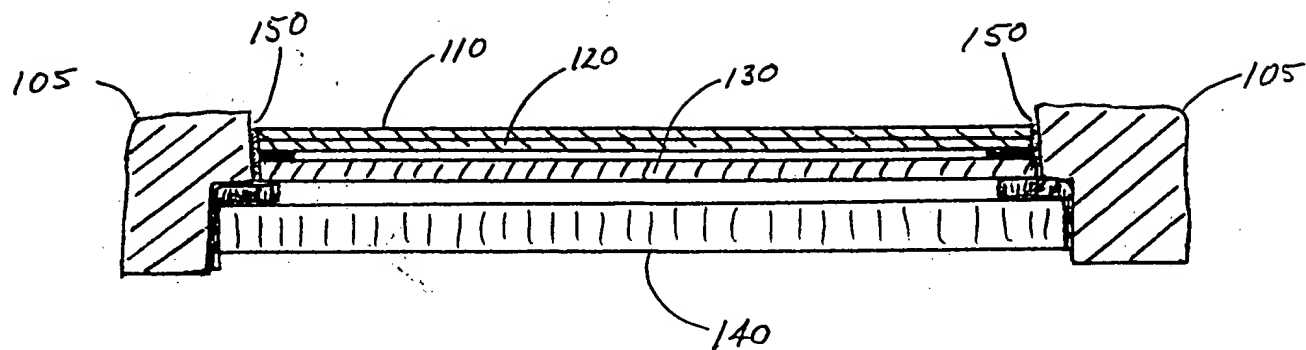
Respectfully submitted,

WAGNER, MURABITO
& HAO LLP


Reginald A. Ratliff
Registration No.: 48,098
Two North Market Street
Third Floor
San Jose, CA 95113
(408) 938-9060

MARKED UP VERSION TO SOW CHANGES MADE

-- An integrated enclosure/touch screen assembly with a soft thermoplastic outer surface coupled directly to a digitizer mechanism. A touch screen assembly consisting of a display mechanism and a resistive digitizer mechanism are enclosed within a single piece cover. The digitizer mechanism consists of a top film and a digitizing element, and the single piece cover is affixed directly to the top film of the digitizer mechanism. The single piece cover has a flat outer surface that is free of any steps or indentations which provides an enclosure that is both dust free and waterproof. [The soft thermoplastic material used for the single piece cover will allow activation of the digitizer mechanism by means of mechanical pressure applied to the outer surface of the single piece cover. In one embodiment, the single piece cover is constructed by coupling a soft thermoplastic outer film directly to the top film of the digitizer mechanism by an in mold decoration process. This process forms the flat outer surface for the single piece cover and also may be used to provide various shapes for the outer edges of the cover. In a second embodiment, a touch screen assembly consisting of a display mechanism and a digitizer mechanism are enclosed within a mechanical support mechanism. A soft thermoplastic film is then coupled directly to the top film of the digitizer mechanism and the support mechanism to form a flat outer surface for the entire enclosure that is free of any steps or indentations.] --



Prior Art

FIGURE 1